Claims

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- Rotor, stator, or field coil for use in an electrical motor or generator, a toroid or a
 toroidal tape core coated with a powder coating, wherein the powder coating is
 obtained by curing a thermosetting powder coating composition comprising an
 epoxy-terminated polyoxazolidone resin and a curing agent for the resin.
- 2. Rotor, stator, field coil, toroid or toroidal tape core according to claim 1 wherein the powder coating composition comprises
- 30 90% by weight of the powder coating composition of an epoxy-terminated polyoxazolidone resin and
 - 0.1 40% by weight of the powder coating composition of a curing agent for the resin.
- 3. Rotor, stator, field coil, toroid or toroidal tape core according to claim 1 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting an diepoxide with 1,6-hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate or 4,4'-diphenylmethane diisocyanate.
- 4. Rotor, stator, field coil, toroid or toroidal tape core according to claim 1 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate with a diglycidyl ether of bisphenol A or a diglycidyl ether of novolac.
- 5. Rotor, stator, field coil, toroid or toroidal tape core according to claim 1 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate selected from the group consisting of 1,6-hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate, and 4,4'-diphenylmethane diisocyanate with a diepoxide selected from the group consisting of a diglycidyl ether of bisphenol A and a diglycidyl ether of novolac.

6. Rotor, stator, field coil, toroid or toroidal tape core according to claim 2 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting an diepoxide with 1,6-hexamethylene diisocyanate, 2,6hexahydrotoluylene diisocyanate or 4,4'-diphenylmethane diisocyanate.

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7. Rotor, stator, field coil, toroid or toroidal tape core according to claim 2 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate with a diglycidyl ether of bisphenol A or a diglycidyl ether of novolac.

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Rotor, stator, field coil, toroid or toroidal tape core according to claim 3 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate with a diglycidyl ether of bisphenol A or a diglycidyl ether of novolac.

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9. Rotor, stator, field coil, toroid or toroidal tape core according to claim 6 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate with a diglycidyl ether of bisphenol A or a diglycidyl ether of novolac.

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- 10. Rotor, stator, field coil, toroid or toroidal tape core according to claim 2 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate selected from the group consisting of 1,6hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate, and 4,4'diphenylmethane diisocyanate with a diepoxide selected from the group consisting of a diglycidyl ether of bisphenol A and a diglycidyl ether of novolac.
- 11. Rotor, stator, field coil, toroid or toroidal tape core according to claim 3 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate selected from the group consisting of 1,6hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate, and 4,4'-

diphenylmethane diisocyanate with a diepoxide selected from the group consisting of a diglycidyl ether of bisphenol A and a diglycidyl ether of novolac.

12. Rotor, stator, field coil, toroid or toroidal tape core according to claim 4 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate selected from the group consisting of 1,6-hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate, and 4,4'-diphenylmethane diisocyanate with a diepoxide selected from the group consisting of a diglycidyl ether of bisphenol A and a diglycidyl ether of novolac.

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- 13. Rotor, stator, field coil, toroid or toroidal tape core according to claim 6 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate selected from the group consisting of 1,6-hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate, and 4,4'-diphenylmethane diisocyanate with a diepoxide selected from the group consisting of a diglycidyl ether of bisphenol A and a diglycidyl ether of novolac.
- 14. Rotor, stator, field coil, toroid or toroidal tape core according to claim 7 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate selected from the group consisting of 1,6-hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate, and 4,4'-diphenylmethane diisocyanate with a diepoxide selected from the group consisting of a diglycidyl ether of bisphenol A and a diglycidyl ether of novolac.
- 25 15. Rotor, stator, field coil, toroid or toroidal tape core according to claim 8 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate selected from the group consisting of 1,6-hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate, and 4,4'-diphenylmethane diisocyanate with a diepoxide selected from the group consisting of a diglycidyl ether of bisphenol A and a diglycidyl ether of novolac.

- 16. Rotor, stator, field coil, toroid or toroidal tape core according to claim 9 wherein the powder coating composition comprises an epoxy-terminated polyoxazolidone resin obtained by reacting a diisocyanate selected from the group consisting of 1,6-hexamethylene diisocyanate, 2,6-hexahydrotoluylene diisocyanate, and 4,4'-diphenylmethane diisocyanate with a diepoxide selected from the group consisting of a diglycidyl ether of bisphenol A and a diglycidyl ether of novolac.
- 17. Method of using a powder coating composition comprising an epoxy-terminated polyoxazolidone resin and a curing agent for the resin, the method comprising coating a rotor, stator, or field coil in an electrical motor or generator, a toroid or a toroidal tape core with the coating composition.
- 18. Method according to claim 17 wherein the powder coating composition comprises 30 – 90% by weight of the powder coating composition of an epoxy-terminated polyoxazolidone resin and 0.1 - 40% by weight of the powder coating composition of a curing agent for the resin.

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